

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method of asset management comprising:
 - (a) sending an identification query to an asset identification tag;
 - (b) receiving identification data from the asset identification tag, wherein a first data element of the identification data comprises a global routing prefix of an Internet Protocol address and a second data element comprises an asset identifier;
 - (c) based on the global routing prefix, determining a uniform resource locator for a selected asset lookup service of the received global routing prefix; and
 - (d) based on the determined uniform resource locator sending the received asset identifier to the asset lookup service.
2. The method of claim 1, wherein the identification data is compliant with a format of an Internet Protocol version 6 address.
3. The method of claim 1, wherein determining the uniform resource locator comprises:

sending the received global routing prefix to a predetermined resource service; and
receiving the uniform resource locator for the selected asset lookup service.
4. The method of claim 1, wherein the predetermined resource service comprises a Universal Description, Discovery, and Integration Business Registry.
5. The method of claim 1, wherein determining the uniform resource locator comprises:

formatting a uniform resource locator from the received global routing prefix and a predetermined uniform asset lookup service suffix.

6. The method of claim 1, wherein sending an identification query includes transmitting a modulated data signal over a frequency communication channel.

7. The method of claim 6, wherein transmitting a modulated data signal includes transmitting a modulated data signal over a radio frequency communication channel.

8. The method of claim 1, further comprising sending asset property information to the asset lookup service.

9. The method of claim 8, wherein the asset property information includes at least one of an asset physical location, an asset age descriptor, and an asset environment descriptor.

10. The method of claim 1, wherein the identification data comprises a data structure comprising a first data field containing data representing a global routing prefix of an Internet Protocol address having an Internet Protocol address format, a second data field containing data representing a tag index compliant with the Internet Protocol address format, and a third data field containing data representing an asset identifier indicating a property of the asset.

11. The method of claim 10, wherein the tag index identifies the third data field as containing data representing the asset identifier and is independent of a routing location on the Internet.

12. The method of claim 11, wherein the tag identifier contains a predetermined, fixed value independent of a location or route on the Internet.

13. A computer readable medium having computer executable steps for performing the steps recited in claim 1.

14. The computer readable medium of claim 13, wherein the computer executable steps for determining the uniform resource locator comprises computer executable steps for

sending the received global routing prefix to a predetermined resource service, and receiving the uniform resource locator for the selected asset lookup service.

15. The computer readable medium of claim 13, wherein the computer executable steps for performing determining the uniform resource locator comprises computer executable steps for formatting a uniform resource locator from the received global routing prefix and a predetermined uniform asset lookup service suffix.

16. The computer readable medium of claim 13, further comprising computer executable steps for sending asset property information to the asset lookup service.

17. An identification tag having stored thereon a data structure for use in identifying an associated asset, the data structure comprising:

- (a) a first data field containing data representing a global routing prefix of an Internet Protocol address compliant with an Internet Protocol format;
- (b) a second data field containing predetermined fixed data representing a tag index; and
- (c) a third data field containing data representing an asset identifier indicating a property of the asset, wherein the tag index identifies the third data field as containing data representing the asset identifier and is independent of a routing location on the Internet.

18. The identification tag of claim 17, wherein the data structure is compliant with a format of an Internet Protocol version 6 address format.

19. The identification tag of claim 17, wherein the tag index is compliant with a site subnet identification of the Internet Protocol address format.

20. The identification tag of claim 17, wherein the asset identifier is unique.

21. The identification tag of claim 17, wherein the asset identifier comprises data representing an asset type identifier identifying a general property of the asset.

22. The identification tag of claim 21, wherein the asset type identifier identifies a product model.

23. The identification tag of claim 21, wherein the asset type identifier identifies a type of logistics unit of at least one asset.

24. The identification tag of claim 23, wherein the asset identifier comprises data representing a logistics unit identifier identifying a specific and unique logistics unit.

25. The identification tag of claim 17, wherein the asset identifier comprises data representing a serial number identifier identifying a specific and unique asset.

26. A modulated data signal having data fields encoded thereon transmitted over a frequency communication channel, the data signal comprising:

(a) a first data field containing data representing a global routing prefix of an Internet Protocol address having an Internet Protocol address format;

(b) a second data field containing data representing a tag index compliant with the Internet Protocol address format; and

(c) a third data field containing data representing an asset identifier indicating a property of the asset, wherein the asset identifier identifies at least one of an asset model descriptor, a unique asset serial number, an asset physical location, an asset age descriptor, and an asset environment descriptor.

27. The data signal of claim 26, wherein the first, second and third data fields are compliant with an Internet Protocol version 6 address.

28. The data signal of claim 26, wherein the identification data comprises an asset model descriptor.

29. The data signal of claim 28, wherein the asset model descriptor indicates a type of logistics unit of at least one asset.

30. The data signal of claim 28, wherein the asset model descriptor indicates a specific asset model.

31. The data signal of claim 26, wherein the identification data comprises the asset environment descriptor, wherein the asset environment descriptor includes a temperature of the identification tag.

32. A service provided to an application for asset management of assets and running on a computing device, the service comprising:

(a) storing at least one global routing prefix of an Internet Protocol address associated with an asset manager;

(b) associating at least one uniform resource locator with at least one global routing prefix, wherein the uniform resource locator points to an asset lookup service for the asset manager for providing specific asset information, wherein the specific asset information comprises at least one of an asset model descriptor, a unique asset serial number, an asset physical location, an asset age descriptor, and an asset environment descriptor;

(c) receiving a search request and a selected global routing prefix; and

(d) providing the uniform resource locator for the selected global routing prefix.

33. The service of claim 32, wherein the service is provided by a Universal Description, Discovery and Integration Business Registry.

34. A method of asset management comprising:

(a) sending an identification query to an asset identification tag;

(b) receiving identification data from the asset identification tag, wherein a first data element of the identification data comprises a global routing prefix of an Internet Protocol address and a second data element comprises an asset identifier indicating at least

one of an asset model descriptor, a unique asset serial number, an asset physical location, an asset age descriptor, and an asset environment descriptor.

35. The method of claim 34, wherein the identification data further comprises a third data element containing predetermined fixed data representing a tag index compliant with an Internet Protocol address format.

36. The method of claim 35, wherein the first, second and third data elements are compliant with an Internet Protocol version 6 address format.

37. The method of claim 34, further comprising determining a uniform resource locator for a selected asset lookup service based on the received global routing prefix, and based on the determined uniform resource locator, sending the received asset identifier to the asset lookup service.

38. The method of claim 34, further comprising sending the received global routing prefix to a predetermined resource service, and receiving the uniform resource locator from the selected asset lookup service.

39. The method of claim 34, wherein sending an identification query includes transmitting a modulated data signal over a frequency communication channel.

40. The method of claim 34, further comprising sending at least one of the asset physical location and the asset environment descriptor to the asset lookup service for storage.